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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/825,678	04/16/2004	Mikako Ujiie	XA-9730A	8657
181	7590	06/02/2005	EXAMINER	
MILES & STOCKBRIDGE PC 1751 PINNACLE DRIVE SUITE 500 MCLEAN, VA 22102-3833			PIZARRO CRESPO, MARCOS D	
			ART UNIT	PAPER NUMBER
			2814	

DATE MAILED: 06/02/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/825,678	UJIIE ET AL.	
	Examiner	Art Unit	
	Marcos D. Pizarro-Crespo	2814	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 16 April 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 31 and 32 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 31 and 32 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 16 April 2004 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☒ Certified copies of the priority documents have been received in Application No. 10/255,163.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date <u>4/16/04</u> . | 6) <input type="checkbox"/> Other: _____ |

Attorney's Docket Number: XA-9730A

Filing Date: 4/16/2004

Claimed Priority Dates: 8/22/2002 (Divisional of 10/255,163)
9/18/2001 (JP 2001-283717)

Applicant(s): Ujiie, et al.

Examiner: Marcos D. Pizarro-Crespo

DETAILED ACTION

This Office action responds to the preliminary amendment filed on 4/16/2004.

Acknowledgment

1. The preliminary amendment filed on 4/16/2004 has been entered. The present Office action is made with all the suggested amendments being fully considered. Accordingly, pending in this Office action are claims 31 and 32.

Drawings

2. Figures 34-47 should be designated by a legend such as --Prior Art-- because only that which is old is illustrated. See MPEP § 608.02(g).

3. The drawings are objected to as failing to comply with 37 CFR 1.84(p)(4) because reference character 1 has been used to designate both a wiring substrate (see, e.g., fig. 35) and a solder resist (see, e.g., fig. 34).

4. Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. Each drawing sheet

submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Specification

5. The disclosure is objected to because of the following informalities:
 - The title of the invention is not descriptive. A new title is required that is clearly indicative of the invention to which the claims are directed.
 - The current status of the parent application was not included in the preliminary amendment to the specification. A statement reading: "This application is a continuation of application ser no. 10/255,163, filed 8/22/2002, now U.S. Patent no. 6853089." Should be entered following the title of the invention or as the first sentence of the specification.
6. Appropriate correction is required.

Claim Rejections - 35 USC § 102

7. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

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8. Claims 31 and 32 are rejected under 35 U.S.C. 102(b) as being anticipated by Toyoshima (JP 2000-286271).

9. Regarding claim 31, Toyoshima shows (see, e.g., fig. 1 and par. 0009-0011) all aspects of the instant invention including a method of manufacturing a semiconductor device comprising the steps of:

- ✓ Providing a wiring substrate **2a** including:
 - A main surface
 - An insulating film **4a** formed on the main surface
 - A plurality of electrodes **3a** formed on the main surface
 - A surface of the plurality of electrodes **3a** being exposed from the insulating film **4a**
- ✓ Providing a semiconductor chip **6a** having:
 - A main surface
 - A back surface
 - A plurality of semiconductor elements
 - A plurality of electrodes **7a** being formed on the main surface of the chip
- ✓ Forming a groove **13** between the electrodes **3a** on the substrate **2a** and the chip **6a**
- ✓ After the step of forming the groove **13**, fixing the chip **6a** to the insulating film **4a** through a pasty adhesive **5a**
- ✓ After the fixing step, connecting one end of a plurality of conductive wires **8a** to the plurality of electrodes **3a** on the main surface of the wiring substrate **2a**

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- ✓ Covering the chip **6a**, the main surface of the substrate **2a**, and the wires **8a** with a sealing resin **9a**

Wherein:

- ✓ The fixing step is performed so as to allow a protruding portion of the pasty adhesive **5a** flowing out to the outside of the chip **6a** to stay in the groove **13** so as not to reach the electrodes **3a** on the substrate **2a** (see, e.g., fig. 1)
- ✓ The pasty adhesive **5a** is formed on a peripheral surface of the chip **6a** as a slope surface by a raised portion of the adhesive **5a** (see, e.g., fig. 1)

10. Regarding claim 32, Toyoshima shows that the wires **8a** are electrically connected between the electrodes **3a** on the substrate **2a** and the electrodes **7a** on the chip **6a** (see, e.g., fig. 1).

Conclusion

11. Papers related to this application may be submitted directly to Art Unit 2814 by facsimile transmission. Papers should be faxed to Art Unit 2814 via the Art Unit 2814 Fax Center. The faxing of such papers must conform to the notice published in the Official Gazette, 1096 OG 30 (15 November 1989). The Art Unit 2814 Fax Center number is **(703) 872-9306**. The Art Unit 2814 Fax Center is to be used only for papers related to Art Unit 2814 applications.

12. Any inquiry concerning this communication or earlier communications from the examiner should be directed to **Marcos D. Pizarro-Crespo** at **(571) 272-1716** and between the hours of 9:30 AM to 8:00 PM (Eastern Standard Time) Monday through Thursday or by e-mail via Marcos.Pizarro@uspto.gov. If attempts to reach the


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examiner by telephone are unsuccessful, the examiner's supervisor, Wael Fahmy, can be reached on (571) 272-1705.

13. Any inquiry of a general nature or relating to the status of this application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

14. The following list is the Examiner's field of search for the present Office Action:

Field of Search	Date
U.S. Class / Subclass(es): 438/106-127	5/31/2005
Other Documentation: PLUS Analysis	5/31/2005
Electronic Database(s): EAST (USPAT, EPO, JPO)	5/31/2005


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